CLAIMS

1.   A method of activating a portion of an electrophoretic display (10), the method comprising:

        receiving drawing information (14);

        determining at least one drawing-mode waveform (68) based on the drawing information (14);
and

        addressing the portion of the electrophoretic display (10) based on the drawing information
(14) and the drawing-mode waveform (68).

2.   The method of claim 1, wherein the received drawing information (14) includes a keyboard
input.

3.   The method of claim 2, wherein the keyboard input is received from one of a keyboard or a
keypad.

4.   The method of claim 1, wherein the received drawing information (14) includes a drawing
input.

5.   The method of claim 4, wherein the drawing input is received from a touch screen.

6.   The method of claim 1, wherein the received drawing information (14) includes a pointer input.

7.   The method of claim 6, wherein the pointer input is received from one of a mouse or a curs or
generator.

8.   The method of claim 1, wherein determining the at least one drawing-mode waveform (68)
includes:

        selecting the drawing-mode waveform (68) from a set of stored driving waveforms (60) based
on the drawing information (14) and a current optical state of at least one electrophoretic pixel (22) in
the portion of the electrophoretic display (10).

9.   The method of claim 1, wherein the drawing-mode waveform (68) is selected from a lookup
table.

10.   The method of claim 1, wherein addressing the portion of the electrophoretic display (10) includes:

applying the determined drawing-mode waveform (68) a predetermined number of times to write an image onto at least one electrophoretic pixel (22) in the electrophoretic display (10).

11.   The method of claim 1, wherein addressing the portion of the electrophoretic display (10) includes:

writing pixel data onto at least one electrophoretic pixel (22) in the portion of the electrophoretic display (10).

12.   The method of claim 1, further comprising:

storing pixel information based on the received drawing information (14); and

addressing the portion of the electrophoretic display (10) based on the stored pixel information.

13.   The method of claim 12, wherein the stored pixel information includes at least one of the group consisting of a pixel index, a pixel color level, a pixel coordinate, and a pixel counter.

14.   The method of claim 12, further comprising:

updating the stored pixel information when the portion of the electrophoretic display (10) is addressed.

15.   The method of claim 1, further comprising:

addressing a first set of pixels in the electrophoretic display based on the received drawing information and the drawing-mode waveform; and

addressing a second set of pixels in the electrophoretic display based on the received drawing information and a second drawing-mode waveform;

wherein the second drawing-mode waveform is applied to the second set of pixels prior to completion of an image update for the first set of pixels.

16.   A system (12) for activating a portion of an electrophoretic display (10), the system comprising:

an electrophoretic pixel array (20) disposed on a backplane (32);

means for receiving drawing information (14);

means for determining at least one drawing-mode waveform (68) based on the drawing information (14); and

means for addressing the portion of the electrophoretic display (10) based on the drawing information (14) and the drawing-mode waveform (68).

17.   The system of claim 16, further comprising:

means for storing pixel information based on the received drawing information (14); and

means for addressing the portion of the electrophoretic display (10) based on the stored pixel information.

18.   The system of claim 17, further comprising:

means for updating the stored pixel information when the portion of the electrophoretic display (10) is addressed.

19.   An electrophoretic display (10), comprising:

an electrophoretic pixel array (20) disposed on a backplane (32);

a row driver (40) electrically connected to a set of rows (44) of the electrophoretic pixel array (20);

a column driver (50) electrically connected to a set of columns (54) of the electrophoretic pixel array (20); and

a controller (30) electrically connected to the row driver (40) and the column driver (50);

wherein the controller (30) determines at least one drawing-mode waveform (68) based on drawing information (14); and

wherein the controller (30) addresses a portion of the electrophoretic display (10) based on the drawing information (14) and the drawing-mode waveform (68) to write an image onto at least one electrophoretic pixel in the electrophoretic display (10).

20.   The electrophoretic display (10) of claim 19, wherein the controller (30) receives drawing information (14) for the portion of the electrophoretic display (10).